

### The Plan:

The Essex County Health Department has developed a plan in conjunction with the Essex Regional Health Commission and Nutley Hazmat to identify the most salient environmental issues within Essex County, and to propose a plan to address these issues. The Essex County Health Department is the certified lead agent for the provision of environmental services within Essex County under the auspices of the County Environmental Health Act (CEHA). This plan has been formulated and submitted to the New Jersey Department of Environmental Protection (NJDEP) in accordance with the guidelines and requirements contained in the County Environmental Health Standards – Environmental Health Standards of Administrative Procedure (NJAC 7:1H-2.1 et seq.)

### The Community:

Essex County is the second most densely populated county in New Jersey, comprised of 22 municipalities. The County has a population of 793,633 residing within its 127 square miles, and includes 5,726 acres of parkland. The citizens of Essex County are ethnically, racially and financially diversified. Median family income in the County is reported to be \$42,150.

The housing within the County vastly differs from the urban to suburban areas. The urban areas consist mainly of multi-family older dwellings while the suburban areas consist of a mixture of older and newer single family dwellings as well as a smaller percentage of older multi-family dwellings. The County has experienced a boom in construction over the past few years in the suburban areas.

### Local Environmental Issues:

Additionally, the US Environmental Protection Agency (EPA) recently presented county-by-county Emission Density Maps for 34 hazardous air pollutants (HAP) throughout the country and compared them to health benchmarks. The study has been criticized by some as being based on old and nonrealistic data. Despite this shortcoming, emission densities in Tons per square mile for 25 compounds (73%) mapped in Essex County were projected to be in the 95 percentile for the Nation. Though some risk estimates associated with these compounds may be unrealistic, others, such as that for tetrachlorethylene, may

be realistic since numerous emission sources of this compound exist in the county. As a major transportation thoroughfare, Essex County is notably impacted by mobile sources of pollution, particularly those associated with diesel powered vehicles. Clearly the evaluation and control of air pollution is one of the most salient environmental issues within Essex County.

Essex County, with its century old industrial base has been the site of significant industrial contamination prior to the advent of modern pollution control practices and regulation. Fortunately, in recent decades, the most egregious examples of this contamination have been addressed. Likewise many of the sites of less severe chemical contamination have also been addressed. However, this industrial legacy of chemical contamination remains present at many sites and must be addressed. Despite current pollution control practices and regulation, discharges of hazardous substances due to accidents or mechanical failure still occur, and yet, still, there are individuals who choose to ignore or remain ignorant of accepted hazardous substance handling and disposal practices. Thus, the remediation of historical discharges of hazardous substances and the control and prevention of current discharges remain a prominent environmental issue within the County.

Excessive noise is, perhaps, one of the most vexing environmental stressors an individual may experience. A densely populated urban environment with its intimate interface of residential, commercial, industrial and transportation-related activities is often a noisy environment. Such an urban area undergoing a massive boom in new construction has even greater concerns. The prevention of excessive noise and its resolution where it exists will likely always remain an ongoing environmental issue in the urban environment that needs to be addressed with vigilance.

As one of New Jersey's largest counties, Essex County must continuously confront substantial issues relating to the generation, transportation and disposal of solid waste. The Essex County Health Department (ECDOH) has taken direct responsibility for implementing a solid waste control program as delineated in the Essex County Environmental Work Plan. This comprehensive solid waste program includes, but is not limited to, facility compliance inspections and enforcement of solid waste statutes, regulations and ordinances. Essex County's solid waste control program includes continuous monitoring of generators and transporters within Essex County to insure compliance with the Solid Waste Management Act, N.J.S.A. 3:1E-1 et seq. and regulations promulgated at N.J.A.C. 7:26-2.1 et seq.

There are many other issues too numerous to elucidate upon at length in this context that warrant no less a degree of priority. These include surface water quality and the intentional introduction of hazardous substances to the environment in the form of pesticide use.

The resolution and control of these issues can only occur by the participation of all levels of government in consort with all individuals and entities affected by or maintaining a contributory role with regard to these issues. Open and effective government is essential.

## Strategic Goals and Activities:

Placing local concerns within the context of the strategic goals of the NJDEP set forth its performance partnership agreement with USEPA, the authority delegated by NJDEP pursuant to CEHA, and NJDEP priority activities for CEHA, the Essex County Health Department recommends the following:

### **CLEAN AIR**

**Milestone:** By 2007, air throughout the State will meet national Clean Air Act standards for ozone and other air pollutants.

**Activities:** Continue to inspect minor and B source air permitted facilities to determine compliance with the State's air pollution control regulations, with emphasis on inspecting at least 20% of the gas station universe.

Continue to conduct inspections at potential facilities that may require air permits as needed.

Continue to conduct complaint investigations as referred by citizens and NJDEP. Implement actions to have the source of complaints corrected when validated.

Implement an idling enforcement program in areas where idling is a problem.

Continue to compile and maintain files and records to support NJDEP enforcement actions.

Continue to initiate enforcement proceedings in a court of competent jurisdiction against violators as required by the NJDEP.

**Deliverables:** a) Submit all compliance monitoring inspection reports to the NJDEP's Minor Source Compliance Investigation Program within 60 days of completing the inspection.

b) Forward records of enforcement actions to the appropriate NJDEP office in accordance with protocols.

### **NOISE CONTROL**

**Milestone:** Control noise that unnecessarily degrades the quality of life and/or affects the health and safety of the people in Essex County.

Activities: Investigate noise complaints received from citizens and the NJDEP that are under the jurisdiction of the Noise Control Regulations, and if applicable, enforce these regulations to achieve compliance.

As requested by local officials and others provide guidance on noise regulations and noise prevention and abatement.

Deliverables: a) Maintain records of all complaint investigations

b) Submit reports as required by NJDEP.

c) Follow NJDEP guidelines.

### **HAZARDOUS AIR POLLUTANTS**

**Milestone: On an ongoing basis, citizens will be protected from exposure to excesses of hazardous air pollutants from sources that can be identified and controlled with limits of delegated authority and appropriated resources.**

Activities: Participate in the air toxics inventory pilot project as established by NJDEP. Continue to conduct preliminary inspections at the remaining 70% of the potential Chromium generators identified in Phase I.

Report any previously unidentified significant sources of air toxic emissions to NJDEP.

Conduct inspections and outreach efforts in dry cleaners, a known source of tetrachlorethylene emissions, to ensure that all emission control measures required by USEPA and supplemental to those of NJDEP are implemented.

Deliverables: a) Submit all compliance monitoring inspection reports regarding dry cleaners to the NJDEP's Minor Source Compliance Investigation Program within 60 days of completing inspection.

b) Maintain and submit records regarding additional compliance and outreach efforts at dry cleaners to NJDEP and USEPA as requested.

c) Submit deliverables for each phase of the air toxics inventory pilot project to NJDEP.

## **SAFE & HEALTHY COMMUNITIES**

**Milestone:** Exposure to environmental risk will be controlled and minimized.

### **Site Remediation Program:**

**Activities:** Continue to conduct comprehensive inspections of regulated underground storage tanks (UST's) to determine compliance status. Reinspect regulated UST's every three years as resources are allocated.

Identify the precise locations of select Brownfield sites using GPS as requested by NJDEP or the Essex County Brownfield Pilot Project.

**Deliverables:** a) Submit to NJDEP (at CEHA audit) proof of meeting PEOSHA health and safety training requirements.

b) Follow NJDEP guidelines and protocols for UST inspections.

c) Submit completed inspection reports as required by NJDEP.

d) Follow NJDEP notification protocol and submit investigation reports as required by NJDEP.

## **PESTICIDES**

**Objective:** To ensure pesticide control compliance by monitoring activities in accordance with NJDEP protocol.

**Activities:** Continue to conduct routine inspections of schools, restaurants, multi-unit dwellings, commercial landscapers and golf courses to determine whether the owner or operator has applied or caused to be applied any pesticide, and if so, whether such application was performed in compliance with NJAC7:30-1 et seq. and where applicable, was performed by a certified and registered pesticide applicator, a registered operator and/or a registered applicator business.

Continue to check for applicator licenses and inspect service vehicles, pesticide containers, pesticide service containers, storage areas, application and household, structural, turf, ornamental, golf course and area or community-wide notification requirements, permits, and application records while performing inspections pursuant to NJAC7:30-1 et seq. Inspections shall be performed as per the "Standard Operating Procedures for Performing Pesticide Control Investigations under CEHA". Perform complaint investigations and collect samples at the direction of NJDEP.

Deliverables: Submit completed inspection reports and/or NJDEP checklists to the NJDEP Pesticides Program for review and approval.

Compile and maintain files and records to support NJDEP Pesticide Control enforcement actions.

Notify NJDEP on all NOV's and warning letters issued.

## **SOLID WASTE PROGRAM**

Milestone: **To achieve and maintain the safe management of wastes in an environmentally sound manner.**

Activities: Continue to investigate all solid waste complaints received from citizens and NJDEP.

Conduct routine compliance monitoring of Class A, B and C recycling facilities. Continue to provide updated lists to NJDEP.

Conduct routine compliance monitoring of solid waste facilities located within Essex County.

Continue to monitor solid waste transporters and generators. Conduct Exempt Transporter interviews.

Continue to assist the ECUA with their Household Hazardous Waste Collection Days.

Conduct green-*start* compliance assistance inspections at 50% of DPW yards to proactively identify potential environmental problems.

Conduct soil generator inspections as requested.

Identify and require all tire sites with up to 5000 tires on site to comply With the tire site exemptions at N.J.A.C. 7:26-1.4(a)5.

Deliverables: a) Enforce the Solid Waste Management Act and initiate enforcement proceedings pursuant to NJDEP guidelines.

b) Conduct solid waste facility and compost facility inspections at required frequency and update lists.

- c) Provide a listing of tire stockpile sites as they are identified.
- d) Submit all reports required by the NJDEP.

## **CLEAN AND PLENTIFUL WATER**

### **Water Compliance & Enforcement Program**

**Milestone:**    **Control pollution emitted to the waters of the State.**

**Activities:**    Conduct routine compliance monitoring inspections of public non-community potable (PNC) water supplies. Conduct inspections promptly for those systems which are identified as significant non-compliers (SNC), and promptly submit completed inspection reports to the NJDEP. Continue to implement the NJDEP's Zero Tolerance Enforcement policy for PNC violations.

Investigate all water pollution complaints received from citizens and NJDEP. These investigations include, but are not limited to, unpermitted discharges to surface or ground water.

Provide follow up to MCL violations at PNC's. Verify public notification. Verify remedial action(s) taken to return to compliance.

Identify abandoned wells and require proper sealing in accordance with N.J.A.C. 7:9-9.

Each season compile, from all municipalities within the county, the list of recreational bathing areas on lakes and streams, the bacteria data collected as per Chapter 9 of the State Sanitary Code, and the number of beach closings required due to water quality impairments.

**Deliverables:** Compile and maintain files and records to support all inspections and investigations, per above, and NJDEP and county enforcements recommendations. Submit all records and reports to NJDEP within 60 days of the activity.

## **AMBIENT SURFACE WATER SAMPLING**

Objective: Collect five water samples, evenly spaced over any 30-day period, from June 1 through August 31, in accordance with the Field Sampling Manual, at the freshwater ambient monitoring stations established by NJDEP

Activities: NJDEP will provide courier service to transport samples to the NJDEP laboratory in Trenton.

NJDEP will provide appropriate bottles, lab sheets, and bottle labels.

## **EMERGING ISSUES**

### **Hazardous Air Pollutants**

Certain activities related to Hazardous Air Pollutants (HAPs) such as the air toxic pilot Projects have deservedly been designated as a priority issue. The issue of Air Toxics emissions from dry cleaners has not been thoroughly addressed. Drycleaners emit tetrachloroethylene, which is a hazardous air pollutant. Recent studies have shown that occupants in buildings co-located with dry cleaners may be exposed to concentrations of tetrachloroethylene that are of public health concern even when the facility is in compliance with existing NJ regulation. The Essex County Health Department recommends that NJDEP consider the implementation of a pilot project to further explore and identify potential measures to address this concern. Given the level of concern generated by EPA's predicted concentrations of HAPs, the Essex County Health Department suggests the NJDP consider a pilot program to conduct periodic assessments of air quality with regard to hazardous air pollutants. Such assessment could take the form of the collection of periodic "grab samples" which would be submitted for analysis of targeted compounds. Despite the fact that this type of sampling would not provide a comprehensive picture of ambient HAP concentrations, it would provide a cost-effective source of some data that could be compared to the estimates. Presently, there is a void of



data in this area. The Commission would be willing to participate in such a pilot if funded.

### **Resources and Partnerships**

Currently, the Essex County Health Department maintains a staff of two inspectors who handle the solid waste portion of this grant. The Essex County Health Department has inter-local agreements with Essex Regional Health Commission for air, noise and water pollution services and Nutley Hazmat for hazardous response.

These resources have been adequate to conduct mandated programs activities and a limited number of pilot projects. While certain program areas warrant expanded activities, in general, a significant expansion cannot be conducted without the funding to provide the staff and equipment to conduct the activity.